

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           1-25. (Cancelled)

1           26. (Previously Presented) An isolation system with analog communication across  
2           an isolation barrier comprising:  
3                           an isolation barrier circuit having at least one isolation element;  
4                           a digital to analog circuit configured to provide a constant average  
5           analog output signal to the isolation barrier and having an input for receiving an input  
6           digital signal to be communicated across the isolation barrier, said digital to analog circuit  
7           including a digital to analog converter with an input for receiving said input digital signal  
8           and an analog modulation circuit responsive to said digital to analog converter for providing  
9           said constant average analog output signal; and  
10                          an analog to digital circuit having an input coupled to the analog  
11           output of the isolation barrier circuit for providing a digital output signal.

1           27. (Previously Presented) The isolation system of claim 26 in which said analog to  
2           digital circuit includes an analog demodulator circuit responsive to said input analog signal

3 from said isolation barrier, and an analog to digital converter responsive to said analog  
4 signal to provide said digital output signal.

1 28. (Previously Presented) The isolation system of claim 26 in which said isolation  
2 element includes a capacitance.

1 29. (Previously Presented) The isolation system of claim 26 in which said isolation  
2 element includes a transformer.

1 30-32. (Cancelled)